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# The U.S. Army Corps of Engineers

*Delivering innovative, sustainable solutions to the nation's engineering challenges.*

by MAJOR GENERAL WILLIAM T. GRISOLI  
*Deputy Commanding General  
Civil and Emergency Operations  
U.S. Army Corps of Engineers*

Other Federal  
Agency Roles

The U.S. Army Corps of Engineers (USACE) has eight authorized Civil Works mission areas:

- navigation,
- flood risk management,
- environmental protection and restoration,
- hydropower,
- regulatory,
- recreation,
- water supply,
- emergency operations.

We accomplish these missions with an annual civil works appropriation of about \$5.7 billion. We have about 23,200 civilian employees and 300 military personnel devoted to civil works. Our organization is made up of nine regional offices (called divisions) whose boundaries are based on watersheds and divided into 38 local offices or “districts.”

In fiscal year 2010, the U.S. Army Corps of Engineers had 1,167 projects under construction. Of these, 434 were specifically authorized by Congress, and 733 were “continuing authorities” projects. Of the congressionally authorized projects:

- 191 were flood risk management projects;
- 5 were hydropower projects;
- 147 were navigation projects;
- 52 were environmental infrastructure projects;
- 39 were environmental projects.

## Our Navigation Mission

USACE's earliest civil works mission is supporting navigation by maintaining and improving channels, dating to a federal law in 1824 authorizing it to improve

safety on the Ohio and Mississippi Rivers and several ports. Today, the U.S. Army Corps of Engineers operates and maintains about 12,000 miles of inland channels. We also operate 241 lock chambers at 192 sites. Sadly, the nation's infrastructure is aging; the average age of USACE locks is now about 58 years. In addition, USACE maintains 926 coastal, Great Lakes, and inland harbors, which handle more than 250,000 tons of cargo annually.

To maintain and improve federal navigation projects, the U.S. Army Corps of Engineers dredged 263.6 million cubic yards of material in 2009—enough to fill a football field to a depth of 12 miles. More than 82 percent of the material was dredged by 51 separate firms, 33 of which were small businesses. Thus, nearly 90 percent of USACE dredging funds go to private industry.

## Collaboration

We cannot accomplish our missions on our own, however. We need our stakeholder and project sponsors to help address the future needs of the marine transportation system. We also work closely with other federal agencies to utilize the limited resources we are given to meet our missions.

## Vision

The U.S. Army Corps of Engineers' vision is “A great engineering force of highly disciplined people working with our partners through disciplined thought and action to deliver innovative and sustainable solutions to the nation's engineering challenges.”

The cornerstone of this vision rests in us not going it alone. We need our partners. We need our stakeholders. In these days of tight budgets and limited resources, no single agency or entity can collect all of the data they require—or solve all of the problems they face—alone. We must work together to coordinate efforts and to share our expertise, models, data, knowledge, and good ideas.

There is no single federal entity responsible for the planning, construction, operation, maintenance, and use of the U.S. marine transportation system (MTS). Those responsibilities are spread across 27 agencies in 20 federal departments, independent agencies, and White House offices. This is the outgrowth of the 235-year history of a nation whose growth and economic vitality was intrinsically tied to navigation and maritime activities, evolving over time.

Additionally, the marine transportation system faces many challenges. Our nation's critical infrastructure is aging, so we must face the fact that funding to maintain and expand existing facilities to remain internationally competitive is in short supply. We are confronted daily by the importance of safety on our waterways, the necessity to protect life, property, and the environment, and provide for a reliable and resilient system that supports a robust export trade.

#### **Supporting the Federal Partnership**

To join with our federal partners to address these challenges, USACE is an active member of the Committee on the Marine Transportation System (CMTS).

The CMTS "National Strategy" recommends 34 actions under five priority areas, and USACE has taken a strong role in many of these interagency initiatives—particularly regarding navigation technology collaboration—including:

- A collaborative effort with the U.S. Coast Guard and waterway operators in the Gulf of Mexico region to improve preparedness in heavy weather and high water events through coordination and communication, and to reduce the threats posed by breakaway vessels to continuity of operations and critical infrastructure.
- Coordinating and improving delivery and accuracy of relevant navigation safety information. Related projects include developing a "river information system" distribution of lock real-time current velocity information via the Automated Identification System and collaborating with the National Oceanic and Atmospheric Administration to improve charting of precise channel limits and controlling depths.
- Setting common standards for the collection of water depth, tidal levels, bathymetric and topographic mapping, nautical charting, and wave action data.
- A plan to determine federal research and development priorities to address marine transportation

system challenges and improve operations. The USACE has teamed with the Transportation Research Board to sponsor the conference "Transforming the Marine Transportation System: A Vision for Research and Development," which was held June 30 and July 1, 2010.

USACE is leading an interagency team under the CMTS to respond to the president's National Ocean Policy issued in July 2010. This new CMTS task team will develop a collective perspective and plan for federal MTS engagement.

#### **Moving Forward**

The CMTS has provided a successful forum for USACE to work collaboratively with other federal agencies that have responsibility for the marine transportation system.

CMTS efforts have led to marked improvements in services the federal government is able to provide operators working America's waterways. USACE will continue to work with our CMTS partners toward implementing the goals laid out in the National Strategy for the Marine Transportation System to ensure that the U.S. MTS is a safe, secure, and globally integrated network that, in harmony with the environment, ensures a free-flowing, seamless, and reliable movement of people and commerce along its waterways, sea lanes, and intermodal connections.

#### **About the author:**

*Major General William T. Grisoli is the Deputy Commanding General for Civil and Emergency Operations, United States Army Corps of Engineers. He serves as principal advisor to the Chief of Engineers and the Assistant Secretary of the Army for Civil Works, directly interfaces with members of Congress on civil works issues and programs, and is responsible for emergency response missions for civil disasters and FEMA support. General Grisoli is a 1976 graduate of the United States Military Academy and earned a master of science degree in civil engineering from the University of Illinois. He is a registered professional engineer.*

#### **For more INFORMATION:**

All article statistics and further information is available at the U.S. Army Corps of Engineers Web site, [www.usace.army.mil](http://www.usace.army.mil);

Transportation Research Board of the National Academies Web site, [www.trb.org](http://www.trb.org);

and the Committee on the Marine Transportation System Web site, [www.cmts.gov](http://www.cmts.gov).